

WHAT IS CLAIMED IS:

1. An installation structure for an electric rotating machine to a wheel of a motor vehicle, the electric rotating machine being for accomplishing at least one of an electrical driving for the wheel and an electric power generation by a power from the wheel, the installation structure comprising:
 - a wheel hub fixed to and rotatable with the wheel;
 - a bearing through which the wheel hub is rotatably supported;
 - a suspension installed between a vehicle body of the motor vehicle and the wheel;
 - a bearing support member connected to a wheel-side section of the suspension and supporting the bearing;
 - wherein the electric rotating machine includes a power output shaft which is in fit with the wheel hub, and a flange for location of the electric rotating machine in a direction of axis of the power output shaft, the flange being brought into contact with a wheel-side section of the bearing support member.
2. An installation structure as claimed in Claim 1, wherein the bearing support member includes a section defining a hole, wherein the electric rotating machine is disposed in the hole in a manner to extend through the hole.
3. An installation structure as claimed in Claim 1, wherein the bearing is formed integral with the electric rotating machine.
4. An installation structure for an electric rotating machine to a wheel of a motor vehicle, the electric rotating machine being for accomplishing at least one of an electrical driving for the wheel and an electric power generation by a power from the wheel, the installation structure comprising:

a wheel hub fixed to and rotatable with the wheel, the wheel hub including a cylindrical shaft section;

a bearing counterpart member including a cylindrical shaft section, and a flange section integral with the cylindrical shaft section, the cylindrical section of the bearing counterpart member being arranged coaxial with the cylindrical section of the wheel hub so as to form a cylindrical bearing;

a suspension installed between a vehicle body of the motor vehicle and the wheel; and

a bearing support member connected to a wheel-side section of the suspension and supporting the bearing, the bearing support member including a section defining a hole;

wherein the electric rotating machine includes a housing which is disposed in the hole of the bearing support member and extends toward the vehicle body, a power output shaft which extends from the housing and passes through the bore of the cylindrical bearing to be fitted in the wheel hub, and a flange for location of the electric rotating machine in a direction of axis of the power output shaft, the flange being fixedly connected to the housing and brought into contact with a wheel-side section of the bearing support member, the flange being fastened to the bearing support member.

5. An installation structure as claimed in Claim 1, wherein the flange of the electric rotating machine is disposed between and fastened to the bearing support member and the flange section of the bearing counterpart member.

6. An installation structure as claimed in Claim 1, wherein the flange section of the electric rotating machine is formed integral with the flange section of the bearing counterpart member so as to form a bearing-flange section.

7. An installation structure as claimed in Claim 6, wherein the bearing-flange section being fastened to the bearing support member.